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| 10/725,750      | 12/02/2003  | Brooks R. Lesert     | LES03 P-300A        | 3255             |

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| EXAMINER |
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GUADALUPE, YARITZA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2859

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|---|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/725,750        | <b>Applicant(s)</b><br>LESERT, BROOKS R. |  |
|                              | <b>Examiner</b><br>Yaritza Guadalupe McCall | <b>Art Unit</b><br>2859                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

In response to Applicant's reply filed October 17, 2005

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 5, 7 – 14, 16 – 20, 22 – 29 and 31 - 34 are finally rejected under 35 U.S.C. 102 (b) as being anticipated by Jackson et al. (US 6,839,972 ).

With respect to claim 1, Jackson et al. discloses a portable wheel alignment apparatus comprising a portable unit including a vertical post ( See Figures 1C and 7A ), the vertical post having a camera boom ( 230 ) thereon, the camera boom being adapted to move vertically along the post ( 52 ), at least one light reflector ( 80a, 80b, 80c, 80d ) adapted to be connected to a wheel of a vehicle ( See Figure 1A ), and at least one docking station ( right and left stations as shown in Figure 1A ) including each a module as shown in figures 1C, 7A and 7B ) for the portable unit, each one of the at least one docking station being configured to be positioned in front of a bay for a vehicle ( as shown in figure 1A ) whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the

bay can be measured through interaction of the camera boom and the at least one light reflector, therefore, anticipating and meeting the structural requirements of the claimed subject matter.

Jackson et al. also discloses, on an alternate embodiment, a portable wheel alignment apparatus comprising a portable unit ( 290 ) including a vertical post ( See attached figure 7B ), the vertical post having a camera boom ( 290 ) thereon, the camera boom being adapted to move along a rail ( 293 ), at least one light reflector ( 80a, 80b, 80c, 80d ) adapted to be connected to a wheel of a vehicle ( See Figure 1A ), and at least one docking station ( 391, 393; see attached figure 7B ) for the portable unit, each one of the at least one docking station being configured to be positioned in front of a bay for a vehicle ( as shown in figure 1A ) whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the bay can be measured through interaction of the camera boom and the at least one light reflector.

Jackson et al. further teaches, on the embodiment shown in Figures 1C and 7A, a wheel alignment apparatus having a camera boom ( 230 ) adapted to move vertically on the vertical post ( 52 ) and further suggests to combine the embodiments of Figures 7A and 7B in order to provide an alignment apparatus that moves in an X – Y plane ( See Column 10, lines 11 – 23 ). These suggested arrangements will provide a modified alignment apparatus having a docking station ( 391, 393 ) including a rail for movement of the camera in the horizontal direction along said rail, a portable unit having a vertical post ( as shown in attached figure 7B ) and a camera (290) adapted to move vertically on the vertical post as shown in Figure 1C.

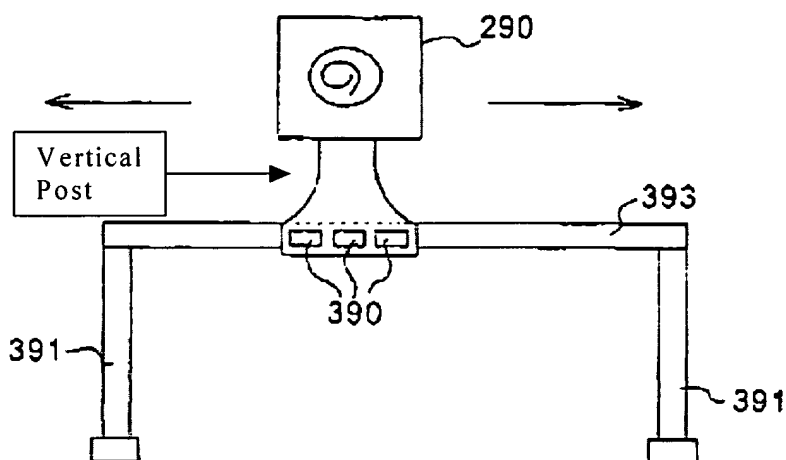


FIG. 7B

In regards to claim 2, Jackson et al. also discloses a portable wheel alignment apparatus wherein the at least one docking station comprises at least two docking stations, since as suggested from figure 1A, there is a left side alignment module ( 2 ) and a right side alignment module ( 4 ), each requiring a support as shown in figures 1C, 7A and 7B.

Regarding claim 3, Jackson et al. also teaches a portable wheel alignment apparatus wherein the camera boom of the portable unit includes at least one camera ( 10R, 290 ).

With regards to claim 4, Jackson et al. further discloses a portable wheel alignment apparatus wherein the at least one camera comprises two cameras, one on the left side and one on the right side as shown in figure 1A.

In regards to claim 5, Jackson et al. discloses a portable wheel alignment apparatus wherein the portable unit further includes a computer ( 900, 904 ) for determining the alignment of the wheels of the vehicle ( See Columns 12 and 13 ).

With respect to claim 7, Jackson et al. teaches a portable wheel alignment apparatus wherein the portable unit and the at least one docking station including an engaging mating structure ( 390 ); and the engaging mating structure properly position the portable unit in the at least one docking station when engaged ( see Figure 7B ).

In regards to claims 8 and 23, Jackson et al. discloses an apparatus ( See Figures 1C and 7B ) having a portable unit and at least one docking station, said portable unit mounted to a vertical post ( 52 ) and including a retractable pin ( 252, 254, 256, 258 ) configured to be inserted into an opening to lock the portable unit in place in the vertical post of the at least one docking station ( See Column 8, lines 38 – 44 ).

Regarding claim 9, Jackson et al. discloses a portable wheel alignment apparatus wherein the portable unit includes at least one bump roller/wheels ( 390 ); the at least one docking station includes a front face ( See Figure 7B ); and the at least one bump roller is configured to roll on the front face of the at least one docking station as the portable unit is positioned in the at least one docking station.

With respect to claims 10 and 25, Jackson et al. teaches a portable wheel alignment apparatus wherein the portable unit includes what could be considered at least one push bar (393, since this portion could be easily manipulated by the user as a pushing bar ) for easily moving the portable unit, if needed by the user.

In regards to claims 11 and 14, Jackson et al. also teaches a portable wheel alignment apparatus wherein the at least one docking station is incorporated into a track ( 393 ); and the portable unit includes rollers ( 390 ) slidable along the track, and wherein the track is straight.

With respect to claim 12, Jackson et al. further teaches a portable wheel alignment apparatus wherein the track is capable of being attached to a ceiling of the bay, since the upright post ( 52 ) or posts ( 391 ) could be mounted to any desired surface.

With respect to claim 13, Jackson et al. discloses a portable wheel alignment apparatus wherein the track includes a pair of support posts ( 391 ) configured to be mounted to a floor of the bay ( See Figure 7B ).

In regards to claim 16, the method of measuring the alignment of a wheel of a vehicle comprising the step of providing a portable unit including a vertical post, the vertical post having a camera boom with a camera thereon ( See Figure 7B ); connecting a light reflector to the wheel of the vehicle ( See Figure 1A ); engaging the portable unit with a docking station ( See Figure 7B ); moving the camera boom vertically on the vertical post ( See Columns 8 and 10, lines 39 – 41 and 11 – 23 respectively ); reflecting light off of the light reflector; and receiving the light reflected off of the light reflector with the camera will be perform by the regular operation of the apparatus disclosed by Jackson et al.

Regarding claim 17, the method of measuring the alignment of a wheel of a vehicle further including the step of moving the portable unit to a subsequent station for docking the portable unit; engaging the portable unit with the subsequent station; moving the camera boom vertically on the vertical post; connecting a secondary light reflector to a subsequent wheel of a subsequent vehicle; reflecting light off of the secondary light reflector; and receiving the light reflected off of the secondary light reflector with the camera will be perform by the regular operation of the apparatus disclosed by Jackson et al.



In regards to claims 18 – 20, the method of measuring the alignment of a wheel of a vehicle including the steps of providing a portable unit includes providing the camera boom with at least one camera ( right and left side cameras in figure 1A ); wherein the at least one camera comprises two cameras; and providing a portable unit includes providing the portable unit with a computer ( 900, 904 ) and further including determining the alignment of the wheels of the vehicle with the computer will be perform by the regular operation of the apparatus disclosed by Jackson et al.

With respect to claim 22, the method of measuring the alignment of a wheel of a vehicle further including the step of providing the portable unit and the docking station with engaging mating structure; and engaging the engaging mating structure to properly position the portable unit in the docking station will be perform by the regular operation of the apparatus disclosed by Jackson et al.

Regarding claims 24 and 26, the method of measuring the alignment of a wheel of a vehicle including the steps of providing a portable unit includes providing the portable unit with at least one bump roller rollers ( 390 ); and engaging the portable unit with the docking station includes rolling the at least one bump roller/ rollers on a front face of the docking station and the portable unit including rollers slidable along the track will be perform by the regular operation of the apparatus disclosed by Jackson et al.

In regards to claim 27, the method further including the step of attaching the track to a ceiling will be performed by the regular operation of the apparatus disclosed by Jackson et al.

Regarding to claim 28, the apparatus disclosed by Jackson et al. also performs the method of measuring the alignment of a wheel of a vehicle wherein the track includes a pair of support posts ( 391 ) configured to be mounted to a floor of the bay.

With respect to claim 29, Jackson et al. shows an apparatus wherein the track is straight.

With regards to claim 31, Jackson et al. teaches a portable wheel alignment apparatus comprising a portable unit including a camera boom vertically movable thereon, the camera boom including at least one camera ( a right side and a left side camera shown in figure 1A ), at least one light reflector ( 80a, 80b, 80c, 80d ) adapted to be connected to a wheel of a vehicle; and at least two docking stations ( See figure 1A, each of the left and right side modules including one station for supporting the camera as shown in Figure 7A or 7B ) for the portable unit, each one of the at least two docking stations being configured to be positioned in front of a bay for a vehicle whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the bay can be measured through interaction of the camera boom and the at least one light reflector; wherein the portable unit and each of the at least two docking stations include engaging mating structure ( 393 ); and

the engaging mating structure engage to selectively position the portable unit in one of the at least two docking stations.

Regarding claim 32, Jackson et al. teaches an apparatus wherein the portable unit ( 230 of Figure 1C, 380 of Figure 7A, and 290 of Figure 7B ) is separate from ( since all the figures disclose these members being removably attached by means of pins or screws ) and unattached/attached as desired by the user to any of the docking stations, as the portable unit could be moved between the at least two docking stations and moved along said stations during adjustment and calibrations performed prior to use.

In regards to claim 33, the method of measuring the alignment of a wheel including the step of completely separating the portable unit ( 230 of Figure 1C, 380 of Figure 7A, and 290 of Figure 7B ) from the docking station and the subsequent station ( be removing the pins or screws that removably retains them in place during use ) will be met during the regular operation of the apparatus disclosed by Jackson et al.

With respect to claim 34, Jackson et al. further teaches an apparatus wherein the portable unit ( 230 of Figure 1C, 380 of Figure 7A, and 290 of Figure 7B ) is separate from and unattached to any docking stations ( since all the figures disclose these members being removably attached by means of pins or screws ) as the portable unit is moved between the at least two stations.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 15, 21 and 30 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al. ( US 6,839,972 ).

Jackson et al. discloses an alignment apparatus as stated in paragraph 2 above.

Jackson et al. does not disclose the hydraulically or pneumatically driven cylinder for moving the camera boom vertically on the vertical post as stated in claims 6 and 21. Jackson et al. does not disclose the track having a curved section as stated in claim 15 and 30.

Regarding claims 6 and 21 : Jackson et al. discloses an alignment apparatus which allows for a combination of embodiments resulting in an apparatus having a docking station and a portable unit mounted to said docking station and having a vertical post for vertically moving the camera along the post, said vertical movement provided by the actuation of a lever ( 260 ) which allows the camera boom ( 230 ) to slide up and down ( See Column 8, lines 39 – 41 ). The use of

the particular type of a hydraulically or pneumatically driven cylinder for moving the camera boom vertically on the vertical post claimed by applicant is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as the camera boom and camera are vertically adjustable along the vertical post, as already suggested by Jackson et al., 2) the a hydraulically or pneumatically driven cylinder claimed by Applicant and the repositioning mechanism including a plate and lever used by Jackson et al. are well known alternate types of positioning mechanisms which will perform the same function, if one is replaced with the other, of adjusting the vertical displacement of the camera along the vertical post, and 3) the use of the particular type of a hydraulically or pneumatically driven cylinder by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of positioning mechanism that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to adjust the vertical displacement of the camera along the vertical post, as already suggested Jackson et al.

With respect to claims 15 and 30 : the portable wheel alignment apparatus disclosed by Jackson et al. includes a docking station ( shown in figure 7b ) having a straight track. Furthermore, the use of a track having a curved section, absent any criticality, is only considered to be an obvious modification of the shape or configuration of the track shape disclosed by Jackson et al. that a person having ordinary skill in the art at the time the invention was made would have found obvious to provide since the courts have held that a change in shape or

configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by Applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 (CCPA 1976). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to change the track shape to a shape having a curve in order to increase the versatility of the apparatus by increasing the range of motion of the portable unit along the track and since Jackson et al. recognizes and explicitly suggests that it would have been an obvious matter of design choice and well known to a skilled artisan to provide other variations of repositioning mechanisms in order to increase the range of motion of the cameras ( See Column 10, lines 11 – 20 ).

### ***Response to Arguments***

5. Applicant's arguments filed October 17, 2005 have been fully considered but they are not persuasive.

Applicant argues that the Jackson et al. patent does not disclose or suggest the portable unit including a vertical post having a camera boom adapted to move vertically on the vertical post as stated in claim 1. The Examiner disagrees with Applicant's contentions. Claim 1, as recited, requires a portable wheel alignment apparatus comprising a portable unit including a vertical post ( See Figures 1C and 7A ), the vertical post having a camera boom ( 230 ) thereon,

the camera boom being adapted to move vertically along the post ( 52 ), at least one light reflector ( 80a, 80b, 80c, 80d ) adapted to be connected to a wheel of a vehicle ( See Figure 1A ), and at least one docking station ( right and left stations as shown in Figure 1A ) including each a module as shown in figures 1C, 7A and 7B ) for the portable unit, each one of the at least one docking station being configured to be positioned in front of a bay for a vehicle ( as shown in figure 1A ) whereby the portable unit can be removably positioned in the at least one docking station and an alignment of the wheels of the vehicle in the bay can be measured through interaction of the camera boom and the at least one light reflector, therefore, anticipating and meeting the structural requirements of the claimed subject matter.

In regards to claims 2 – 15, applicant's arguments are not persuasive and the rejection is maintained for the reasons given in paragraph 2 above and for the reasons given with respect to claim 1.

Similarly, for the reasons indicated above and since all the structural features required by the apparatus as claimed are fully disclosed by Jackson et al., the method steps as recited in claims 16 – 30 are considered to be fully met by the regular operation of the apparatus shown by Jackson et al.

In regards to claim 31, Applicant indicates that Jackson et al. does not disclose the at least two docking stations whereby the portable unit can be removably positioned. This argument is not persuasive. As shown in Figure 1A, Jackson et al. teaches a left and right side modules, each

one including a camera mounted to a docking station ( upright post 52 of Figure 7A, or post and rail 391, 393 of Figure 7B ). Therefore, Jackson et al. clearly teaches a device having at least two docking stations as required by the claimed subject matter.

### *Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

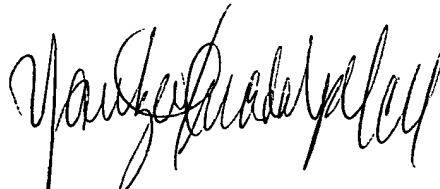
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe McCall whose telephone number is (571)272-2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yaritza Guadalupe-McCall  
Patent Examiner  
Art Unit 2859

YGM  
December 22, 2005